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NOTICE OF ALLOWANCE AND FEE(S) DUE

22428 7590 12/23/2010
FOLEY AND LARDNER LLP
SUITE 500
3000 K STREET NW

WASHINGTON DC 20007

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,895	11/07/2006	Tadahiro Ohmi	039262-0165	8302

TITLE OF INVENTION: PLASMA PROCESSING METHOD AND METHOD FOR MANUFACTURING AN ELECTRONIC DEVICE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	YES	\$755	\$300	\$0	\$1055	03/23/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT, PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and I/2 the ISSUE FIEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE DEE and DURI ICATION DEE (if required). Blocks 1 through 5 should be completed where

appropriate. All further indicated unless correct maintenance fee notifica	correspondence including ed below or directed other tions.	ng the Patent, advance of herwise in Block 1, by (rders and notification of a) specifying a new corr	maintenance fees espondence address	will be ; and/o	mailed to the current r (b) indicating a sepa	correspond arate "FEE .	ence address as ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.				
22428 7590 1223/2010 FOLEY AND LARDNER LLP SUITE 500 3000 K STREET NW			IIa			-		
			I b Str ad tra	Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop 182E FEE; address above, or being facsimile transmitted to the USPIO (571) 273-2865, on the date indicated below.				
WASHINGTON	I, DC 20007							(Depositor's name)
								(Signature)
								(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTO	R	ATTC	RNEY DOCKET NO.	CONFIRM	MATION NO.
10/594,895	11/07/2006		Tadahiro Ohmi	039262-0165		039262-0165	8	3302
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APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	D/	ATE DUE
nonprovisional	YES	\$755	\$300	\$0		\$1055	03	3/23/2011
EXAM	IINER	ART UNIT	CLASS-SUBCLASS]				
BROWN, V		2829	438-769000	_				
1. Change of correspond CFR 1.363).	ence address or indicatio	n of "Fee Address" (37						
☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/1/22) attached. ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.					
PLEASE NOTE: Un recordation as set fort	less an assignee is ident h in 37 CFR 3.11. Com	ified below, no assignee pletion of this form is NC	data will appear on the T a substitute for filing a	patent. If an assig n assignment.	nee is i	lentified below, the d	ocument ha	s been filed for
(A) NAME OF ASSI			(B) RESIDENCE: (CIT					
Please check the appropr	riate assignee category or	categories (will not be n	rinted on the patent):	Individual D	'ornorat	ion or other private en	oun entity. [Government
4a. The following fee(s) Issue Fee	are submitted:	4	 b. Payment of Fee(s): (Please) A check is enclosed. 		ny pre	lously paid issue fee	shown abov	ve)
	o small entity discount j	permitted)	Payment by credit c	ard. Form PTO-203				
Advance Order -	# of Copies		The Director is herel overpayment, to Dep	by authorized to cha	rge the er	required fee(s), any de (enclose a	ficiency, or n extra copy	credit any y of this form).
5. Change in Entity Sta								
	s SMALL ENTITY state		b. Applicant is no lo					
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepte ites Patent and Trademarl	ed from anyone other than k Office.	the applicant; a reg	istered	attorney or agent; or th	ie assignee o	or other party in
Authorized Signature				Date				
Typed or printed name			Registration No.					
		CFR 1.311. The informati	on is required to obtain or	-		lic which is to file (and	d by the USI	PTO to process)
an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223	tiality is governed by 35 d application form to the ions for reducing this bu 'irginia 22313-1450. DO 113-1450.	U.S.C. 122 and 37 CFR e USPTO. Time will var- rden, should be sent to the D NOT SEND FEES OR	on is required to obtain or 1.14. This collection is e of depending upon the induced the Chief Information Officom COMPLETED FORMS	stimated to take 12 ividual case. Any c cer, U.S. Patent and IO THIS ADDRES	minute ommen Trader S. SEN	s to complete, including is on the amount of tit nark Office, U.S. Dep D TO: Commissioner	ig gathering ne you requ artment of C for Patents,	, preparing, and tire to complete commerce, P.O. P.O. Box 1450

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10/594,895	11/07/2006	Tadahiro Ohmi	039262-0165	8302	
22428	7590 12/23/2010		EXAM	UNER	
FOLEY AND LARDNER LLP			BROWN, VALERIE N		
SUITE 500			ART UNIT	PAPER NUMBER	
3000 K STREET NW WASHINGTON, DC 20007			2829 DATE MAILED: 12/23/2010		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 294 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 294 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)			
10/594,895	OHMI ET AL.			
Examiner	Art Unit			
VALERIE BROWN	2829			

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously malled), a Notice of Allowance (PTOL-85) or other appropriate communication will be malled in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.

This communication is responsive to 09/20/10.

2.

The allowed claim(s) is/are 1,3,5 and 6.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

2.
☐ Certified copies of the priority documents have been received in Application No. _____

 Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

 $5. \ \, \square \ \, \text{CORRECTED DRAWINGS (as "replacement sheets") must be submitted}.$

(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

1) ☐ hereto or 2) ☐ to Paper No./Mail Date

(b) Including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date

Identifying Indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. Notice of References Cited (PTO-892)

2.
Notice of Draftperson's Patent Drawing Review (PTO-948)

 Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date

Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. Notice of Informal Patent Application

 Interview Summary (PTO-413), Paper No./Mail Date .

7.

Examiner's Amendment/Comment

8. X Examiner's Statement of Reasons for Allowance

9. 🔲 Other ____

Application/Control Number: 10/594,895 Page 2

Art Unit: 2829

1

REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: Claim 1 recites the limitation of introducing said nitrous oxide gas, as said process gas, from said lower shower plate into the plasma whose electron temperature is less than binding energy 2.24 eV between a nitrogen molecule and an oxygen atom in said nitrous oxide, said nitrous oxide gas being introduced into the plasma under said lower shower plate, wherein said nitrous oxide gas is provided to said lower shower plate from a gas discharge tube provided at only one end of said lower shower plate, to thereby be discharged through respective openings of said lower shower plate into the process chamber. These limitations in combination with the other limitations as set forth in the claims are neither taught nor suggested in the prior art. Claims 3, 5, and 6 depend from claim 1 and are allowable for at least that reason.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to VALERIE BROWN whose telephone number is (571)270-5015. The examiner can normally be reached on Mon-Fri 8:00am-5:00pm EST.

Application/Control Number: 10/594,895

Art Unit: 2829

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Loke can be reached on 5712721657. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Valerie Brown/ Examiner, Art Unit 2829 12/15/10

/Andy Huynh/ Primary Examiner, Art Unit 2818